SONY

3-752-147-21 (1)

FM/AM Compact Disc Player

COMPACT disc DIGITAL AUDIO

CDX-7520

Operating Instructions

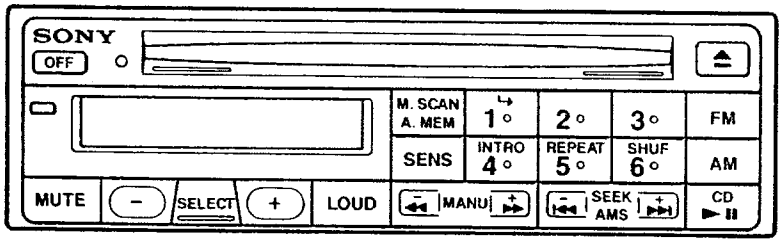
Page 2

Before operating the unit, please read this manual thoroughly and retain it for future reference.

Mode d'emploi

page 23

Avant la mise en service de cet appareil, prière de lire attentivement ce mode d'emploi que l'on conservera pour toute référence ultérieure.



For installation and connection, see the supplied installation/connections manual.

En ce qui concerne l'installation et les connexions, se reporter au manuel d'installation/connexions, fourni.

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For the Customers in the United States

Owner's Record

The model and serial numbers are located at the bottom of the unit. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. CDX-7520 Serial No. _____

CAUTION

The use of optical instruments with this product will increase eye hazard.

INFORMATION

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient the receiving antenna.

Relocate the equipment with respect to the receiver.

Move the equipment away from the receiver.

Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

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Features

DIN-sized mobile CD player and FM/AM tuner

CD section

- Provided with 8 times over-sampling digital filter for dynamic sound reproduction
- Quick-recovery mechanism against sound skipping.
  When strong vibration causes sound skipping, the player quickly relocate the point where the play was interrupted.
- A 3-inch (8 cm) CD can be played without an adaptor.

Tuner section

- Automatic memory function stores a total of 24 stations (18 FM and 6 AM stations) in memory.
- Easy and quick tuning with preset buttons while driving

Others

- Fader control for adjusting the volume of the front and rear speakers in 4-speaker system
- Line outputs and auxiliary inputs for connecting an optional power amplifier, equalizer and a cassette player
- Two color variation (amber or green) for illumination

Precautions

- **Before operating the unit for the first time or after replacing the battery, press the reset button (page 6) with a ball-point pen, etc., then start operating the unit.**
- If your car was parked in direct sunlight and there was a considerable rise in temperature inside the car, allow the unit to cool off before operating.
- If no power is being supplied to the unit, check the connections first. If everything is in order, check the fuse.
- If no sound comes from the speakers of a 2-speaker system, set the fader control to the center position.
- As the laser beam used in this compact disc player is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

Notes on moisture condensation

On a rainy day or in a very damp area, moisture may condense on the lenses inside the unit.
Should this occur, the unit will not operate. In this case, remove the disc and wait for about an hour until the moisture evaporates.

If you have any question or problem concerning your unit that is not covered in this manual, please consult your nearest Sony dealer.

Notes on discs

Handle the disc by its edge, and to keep the disc clean, do not touch the surface.

This way

Do not stick paper or tape.

Not this way

Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight where there can be a considerable rise in the temperature.

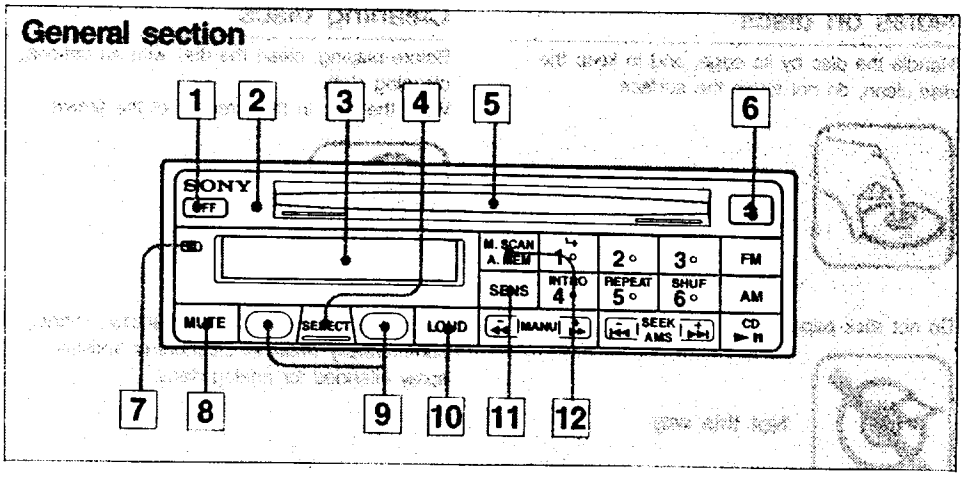
Cleaning discs

Before playing, clean the disc with an optional cleaning cloth.
Wipe the disc in the direction of the arrows.

Do not use solvents such as benzine, thinner, commercially available cleaners or antistatic spray intended for analog discs.

Location of Controls — Refer to the pages indicated in ●.

General section



[1] **OFF (power off) button** ⓫

[2] **Reset button** ❹, ❽

[3] **Display window**

[4] **SELECT (volume/balance/bass/treble/ fader select) button** ❾

[5] **Disc insertion slot**

[6] **⏏ (eject) button** ⓫

[7] **ILL (illumination color change) button**
Press to change the color of illumination. Two colors, green and amber, are available.

[8] **MUTE button**
Press to momentarily mute the sound. Press again to restore the same level as before.

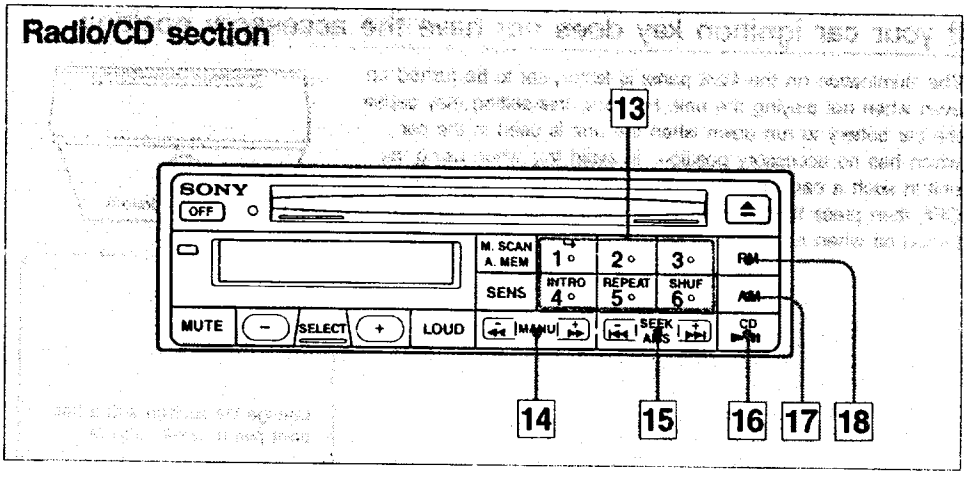
[9] **−/+ buttons** ❾

[10] **LOUD (loudness) button**
Press to reinforce bass and treble especially when listening at low volume. To disengage the button, press it again.

[11] **SENS button** ⓯

[12] **M.SCAN (memory scan) button** ⓯
A.MEM (automatic memory) ⓭

Radio/CD section



13	Number	During disc play	During radio reception
	1	↳ (skipping to the top) button ⑪	Preset number buttons ⑭
	2	—	
	3	—	
	4	INTRO button ⑫	
	5	REPEAT button ⑫	
	6	SHUF (shuffle) button ⑫	

	During disc play	During radio reception
14	MANU ◂◂ / ▸▸ (manual search) button ⑪	MANU +/− (manual tuning) button ⑰
15	AMS* ⏮ / ⏭ button ⑬	SEEK +/− (automatic tuning) button ⑮

16 CD ► ■ (disc play/pause) button ⑩, ⑪

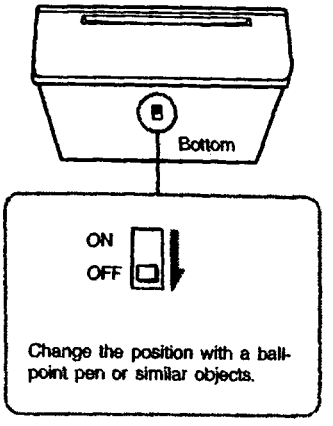
17 AM (tuner on/band select) button ⑱

18 FM (tuner on/band select) button ⑲

* Automatic Music Sensor

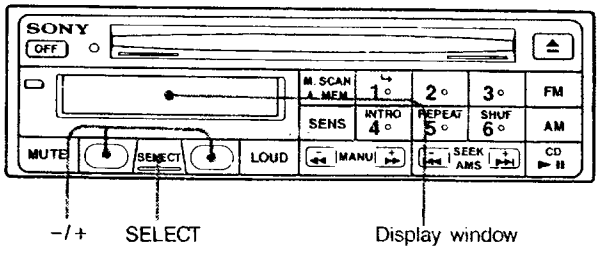
If your car ignition key does not have the accessory position

The illumination on the front panel is factory-set to be turned on even when not playing the unit. However, this setting may cause the car battery to run down when the unit is used in the car which has no accessory position. To avoid this when using the unit in such a car, set the selector located on the bottom to OFF, then press the reset button. You can make the illumination turned off when not playing the unit.

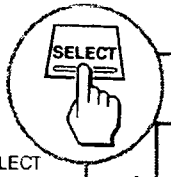


Adjusting a Sound

Controlling the volume/balance/bass/treble/fader



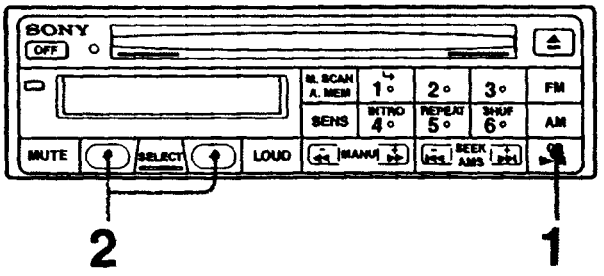
−/+ button normally functions as the volume control. Adjust the level within three seconds after selecting the desired control mode with the SELECT button. Otherwise, the mode goes back to the volume control mode.



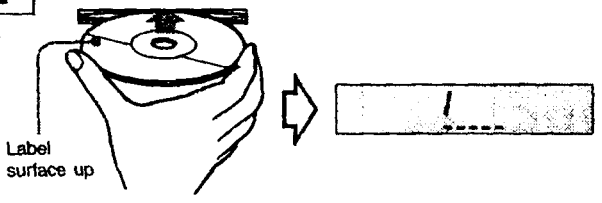
Each time the SELECT button is pressed, the display indication will change as follows.

Display window	Control mode	(−) button	(+) button
BAS	Bass	For less bass	For more bass
TRE	Treble	For less treble	For more treble
BAL	Balance	To decrease the right-speaker volume	To decrease the left-speaker volume
FAD	Fader	To decrease the rear-speaker volume	To decrease the front-speaker volume
VOL	Volume	For less volume	For more volume

Playing a Disc

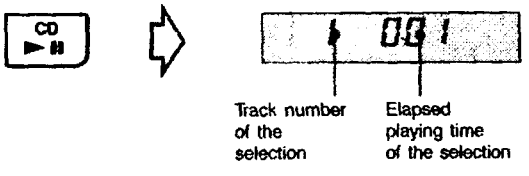


1



The disc is loaded into the unit and play will start from the beginning of the disc.

When a disc is already inserted



2 **Adjust the volume.**

Notes

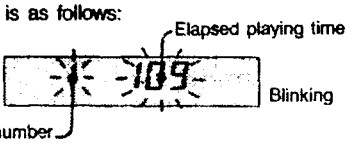
- Do not insert a disc with the label surface down. Doing so may damage the unit.
- Do not try to insert another disc when one has been already inserted. Doing so may damage the unit.

At the end of the disc

The track number returns to 1 and play will be repeated from the beginning of the disc.

Important

Since the CD system offers a wide dynamic range, the peaks of the high level inputs are recorded with high fidelity, and the noise level is very low. Do not turn up the volume while listening to a portion with no audio signals or very low level inputs. If you do, the speakers may be damaged when a peak level portion is played.

To stop the disc play	Press OFF. To restart playing from the same point, press ►/■.
To pause the disc play	Press ►/■. The display when you press the ►/■ button is as follows:  To restart the play from the same point, press ►/■.
To remove the disc	Press ⏏. Even if you set the ignition key to the off position, you can remove the disc by pressing ⏏.

Locating a Particular Selection

Locating a selection in sequence (Automatic Music Sensor)

You can locate the beginning of a desired selection during play.

To locate the beginning of the selection being played	Press ⏮ once.
To locate the beginning of the next selection	Press ⏭ once.

Press repeatedly to locate previous selections or selections ahead.

Locating a Particular Point in a Selection

Locating a point in sequence (Manual Search)

You can locate a particular point in a selection during play by monitoring the high-speed sound.

To go back at high speed	Keep ◄◄ pressed.
To go ahead at high speed	Keep ►► pressed.

Locating the Beginning of the Disc

Press [1].

You can quickly locate the beginning of the disc being played.

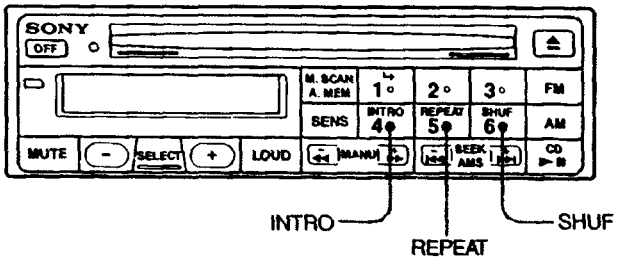
Note on a 3-inch (8 cm) CD
You can play a 3-inch (8 cm) CD without an adaptor.

If you press the FM or AM button during the disc play
The disc play will stop automatically and the radio sound will be heard.

Note on a 12 cm disc
If you leave the disc putting into the slot after pressing the ⏏ button, the disc will be inserted automatically in fifteen seconds to protect the disc. If you press the ►/■ button within the fifteen seconds, the disc will be inserted and the disc play start from the beginning of the disc.

Keeping the ►► button pressed
The time counter displays "- -" when you have passed the end of the disc. To return to a normal display, press ⏮ or ◄◄ button.

Enjoying the Variety of CD Playing Modes



Playing the First Portions of Selections

INTRO 4

You can play the first ten seconds of each selection in order.
If you find a desired selection, press the button to cancel the mode. The play continues.

If you press the INTRO button during the shuffle play, the first ten seconds of all sselections will be played in random order.

Playing Repeatedly—Repeat Play

REPEAT 5

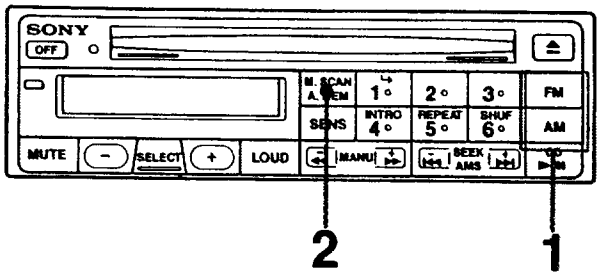
You can repeat a single selection
To cancel
Press the button again.

Playing in Random Order—Shuffle Play

SHUF 6

You can play the selections in random order.
To cancel
Press the button again.

Memorizing the Stations Automatically (Automatic Memory Function)



You can memorize a total of 24 stations—6 stations on each band (FM1, FM2, FM3,* or AM), one on each preset button.

1

FM

or

AM

Press to select a desired band.
The tuner turns on at the same time.

2

M. SCAN
A. MEM

Press for more than two seconds.
The unit starts scanning the selected band and memorizes the tuned stations on the preset buttons 1 to 6 automatically.

In what order are stations memorized?
The unit scans the band from the lowest frequency to the highest frequency twice. At the first cycle, the unit scans only the stations with considerably strong signals. At the next cycle, the minimum level of the signal strength that can be tuned will be lowered.

* Frequency range of the FM1, FM2 and FM3 bands is same.

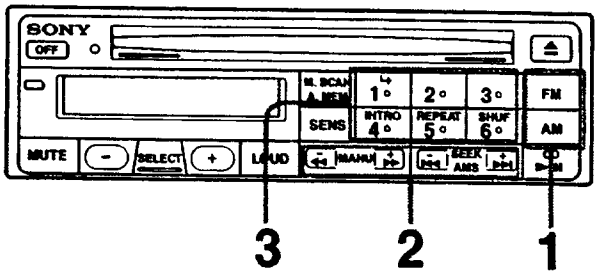
Surveying What is Being Broadcasted on the Preset Stations

M. SCAN
A. MEM

Press lightly.

Each memorized station will be scanned for five seconds in order. (When the broadcast of the memorized station is too weak, it cannot be received.)

Memorizing Only Desired Stations Manually



Use this method to memorize stations not memorized by the automatic memroy function.

1 **Press to select a desired band.**
The tuner turns on at the same time.

FM or AM

2 **Press to tune in a desired station. (page 15 or 17).**

MANU or SEEK AMS

3 **Press for more than two seconds.**
Ex. To memorize on the preset button 1

1 FM 1043

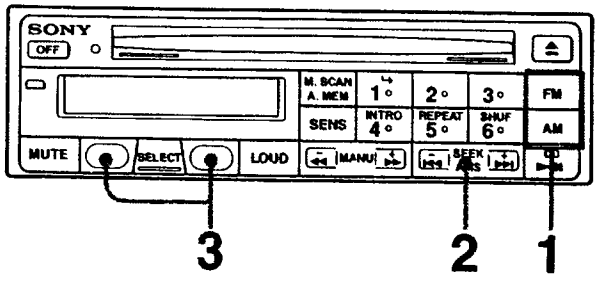
The number of the pressed preset button will be displayed and the station will be memorized.

Important
Each preset button has only one memory for a band. The previously memorized station will be erased when you enter a new station of the same band on the same preset number button.

Receiving the Preset Station

1 Select a desired band.
2 Press a desired preset button lightly.

Tuning in Automatically



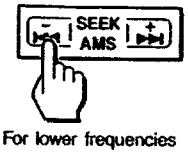
Use this method when you do not know the frequency of desired stations.

1 **Press to select a desired band.**

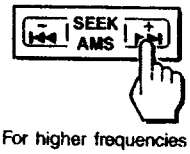
The tuner turns on at the same time.

FM or AM

2 **Press to start scanning**



For lower frequencies



For higher frequencies

The scanning automatically stops when a station is tuned in. Repeat this step until a desired station is tuned in.

3 **Press to adjust the volume.**

When there are too many stations and the scanning stops too frequently during automatic tuning

Press **SENS** so that the LOCAL indicator appears on the display window.

Only the station with comparatively strong signals can be tuned in.

When the FM stereo program is too weak and noisy

Press **SENS** so that the MONO indicator appears on the display window.

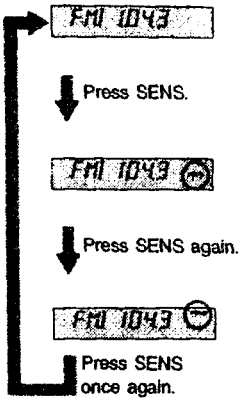
The noise will be reduced. The sound will be monaural instead.

When an FM stereo program of sufficient signal strength is tuned in

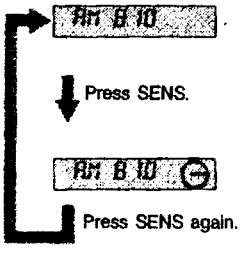
The STEREO indicator appears and the program is automatically received in stereo.

The SENS button functions as follows

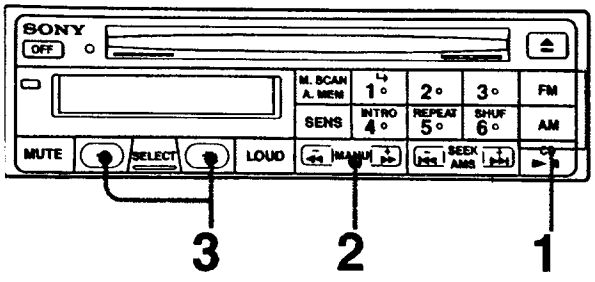
When receiving an FM station



When receiving an AM station



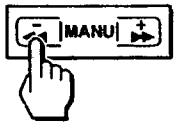
Tuning in Manually



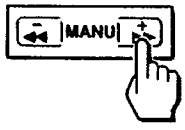
1 **Press to select a desired band.**
The tuner turns on at the same time.

FM or AM

2 **Press to select a desired station.**



For lower frequencies



For higher frequencies

To change the frequency rapidly, keep the button pressed.

3 **Press to adjust the volume.**

For your safety while driving
Keep your eyes on the road and use the automatic tuning or the memory preset tuning!

Specifications

CD player section

System: Compact disc digital audio system
Frequency response: 10 – 20,000 Hz ±3 dB
Signal-to-noise ratio: 90 dB
Wow and flutter: Below measurable limit
Laser Diode Properties
Material
GaAlAs
Wavelength
780 nm
Emission Duration
Continuous
Laser out-put Power
Less than 44.6 μW*
* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

General

Power requirements: 12 V DC car battery (negative ground)
Current drain: 800 mA (CD playback)
2 A (during disc loading or eject)
Operating temperature
−10°C to 50°C (15°F to 120°F)
Dimensions: Approx. 180 × 50 × 146 mm (w/h/d) (7 1/8 × 2 × 5 3/4 in.)
Weight: Approx. 1.7 kg (3 lb 12 oz)
Tone controls: Bass ±10 dB (100 Hz)
Treble ±10 dB (10 kHz)
Supplied accessories
Mounting hardware (1 set)
Optional accessories
Mounting kit
Cleaning cloth XP-CD1

Tuner section

	FM	AM
Tuning range	87.9 – 107.9 MHz	530 – 1,710 kHz
Antenna terminal	FM/AM external antenna connector	
Intermediate frequency	10.7 MHz	450 kHz
Usable sensitivity	12 dBf (1.1 μV/75 ohms)	35 μV
Selectivity	75 dB at ±400 kHz	—
Signal-to-noise ratio	70 dB (monaural) 65 dB (stereo)	55 dB
Harmonic distortion at 1 kHz	0.3% (monaural) 0.5% (stereo)	0.3%
Stereo separation	35 dB	—
Frequency response	30 Hz – 15,000 Hz ±3 dB	

Design and specifications subject to change without notice.

Fuse Replacement

f the fuse blows, check the power connection
ınd replace the fuse. If the fuse blows again
ıfter replacement, there may be internal
nalfunction. In this case, consult your nearest
Sony dealer.

Warning
Jse the specified ampere fuse only.
Jse of a higher amperage fuse may cause
serious damage.

Troubleshooting Guide

The following checks will assist in the correction of most problems which you may encounter with your unit.
Before going through the check list below, first refer back to the connection and operating procedures.

CD player section

Trouble	Cause/Solution
Play does not begin.	• The unit is in the pause mode ➡ Press ▶■. • Dusty or defective disc. • The ambient temperature is more than 50°C (120°F)
Disc cannot be loaded or the disc is automatically ejected.	• A disc is already loaded. • The disc is inserted with the label surface downwards.
The operation buttons do not work.	The built-in microprocessor malfunctions. ➡ Press the reset button.
The sound skips due to vibration	• The unit is installed at an angle of more than 20°. • The unit is not installed on the sturdy part of a car. • Dusty or defective disc.

Tuner section

Trouble	Cause/Solution
Preset tuning is not possible.	• Memorize the correct frequency. • The broadcast is weak. ➡ Use manual tuning.
Automatic tuning is not possible.	The broadcast is weak. ➡ Use manual tuning.
The STEREO indicator flickers.	• Tune in precisely. • The broadcast is weak. ➡ Press the SENS button to display the MONO indicator.

About the error code

The following codes flicker for about five seconds.

Error code	Cause	Solution
E-04	The disc is dirty or inserted upside-down. (In this case, the disc will be ejected automatically.)	• Clean the disc. • Insert the disc correctly.
E-66	A CD-ROM disc is inserted.	Remove the disc.
E-77	The temperature is too high and the protection circuit has been activated.	Wait until the unit cools off.